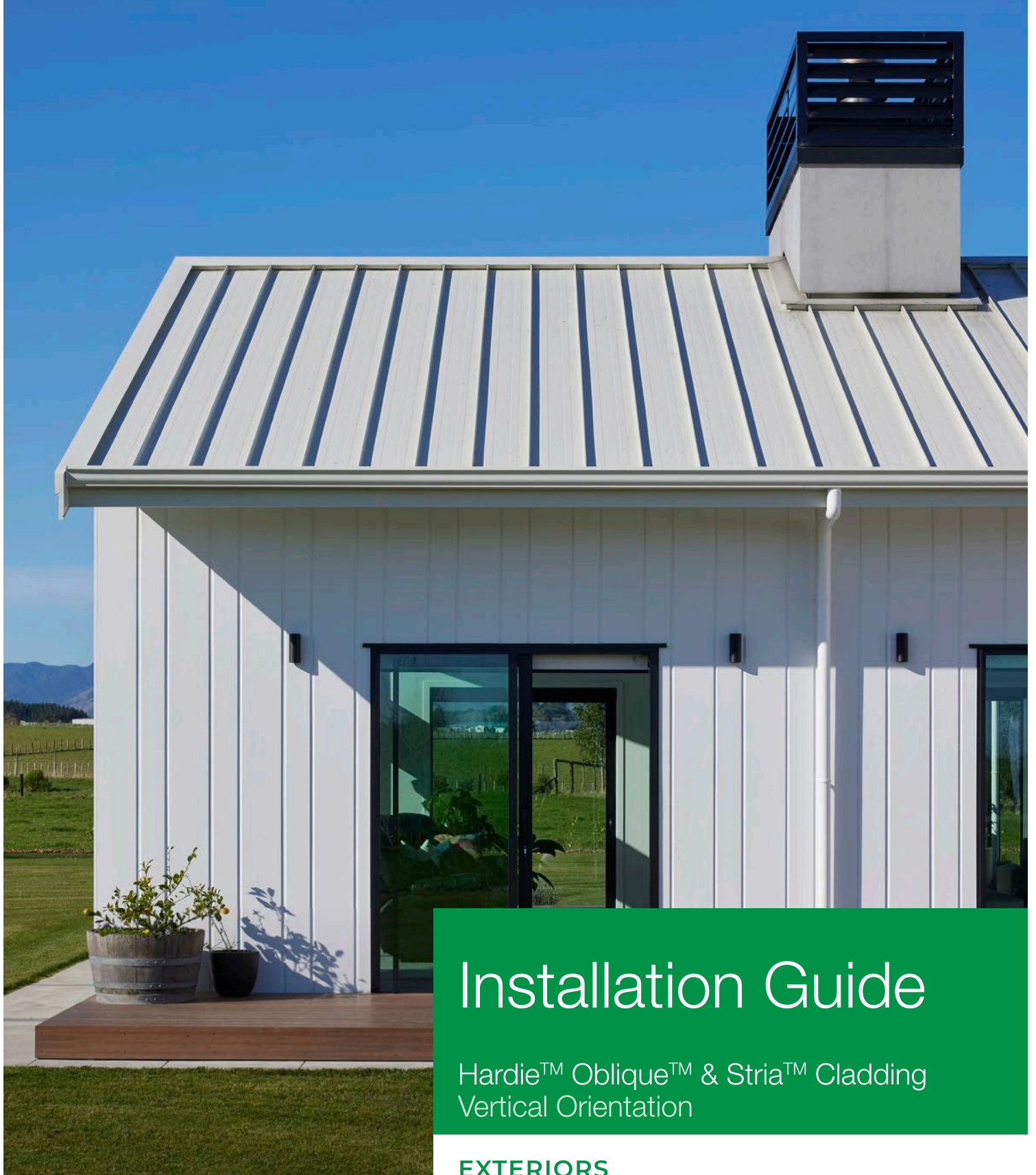




Installation Guide

Hardie™ Oblique™ & Stria™ Cladding
Vertical Orientation

EXTERIORS

Australia May 2024

Make sure your information is up to date.

When specifying or installing Hardie™ products, ensure that you have the current technical information and guides. If in doubt, or you need more information, visit jameshardie.com.au or contact James Hardie on 13 11 03.

CONTENTS

1	INTRODUCTION	2
2	SAFE WORKING PRACTICES	3
	Warning	3
	Recommended safe working practices	3
	Storage and handling	3
3	DESIGN CONSIDERATIONS	3
	Framing	4
	Fasteners	4
4	PRODUCTS AND ACCESSORY DETAILS	5
	Components	5
	Tools	6
5	FACADE LAYOUTS	7
6	FIXING REQUIREMENTS	8
7	CLADDING INSTALLATION STEPS	9
8	CONSTRUCTION DETAILS	10
	Junction Details	10
	External Corner Details	10
	Internal Corner Details	10
	Joint and Jointing Details	11
	Parapet Details	11
	Window Details	12
9	FINISHES AND MAINTENANCE	13
	Surface Preparation	13
	Painting	13
	Maintenance	13
10	PRODUCT INFORMATION	13
11	SITE INSTALLATION CHECKLIST	14

SCOPE

This guide covers the use of Hardie™ Oblique™ and Stria™ Cladding installed on a vertical orientation in a residential wall application over a seasoned timber wall frame or a light-gauge steel frame installed in a vertical upright application.

CODEMARK CERTIFICATION

The CodeMark Certification Scheme is a voluntary third-party building product certification scheme that authorises the use of new and innovative products in specified circumstances in order to facilitate compliance with Volume 1 and 2 of the NCC.

Hardie™ Oblique™ and Stria™ Cladding has been certified under the CodeMark scheme (Certificate Number CM40223) and available at www.jameshardie.com.au. This certificate can be provided to building certifiers and other regulatory authorities to facilitate the assessment of the product compliance or used to verify the suitability of the product for certain applications.



1 Introduction

Create diverse modern designs with Hardie™ Oblique™ Cladding and Stria™ Cladding.

Stria™ Cladding has a simple U-shaped groove spaced at 300mm or 380mm depending on the chosen size. Hardie™ Oblique™ Cladding has an asymmetrical groove with one square edge and a long oblique or slanting edge, the groove spacing is 175mm and 275mm depending on the profile. Both products can be installed in vertical or horizontal orientation for different looks.

Vertical Orientation. Vertical grooves are a striking exterior design feature that can be brought to life with Hardie™ Oblique™ Cladding and Stria™ Cladding. Vertical installation of these Hardie™ exterior cladding products is enabled by the Hardie™ Structural Batten, which is simple and easy to use.

IMPORTANT NOTES

1. Failure to install, finish or maintain this product in accordance with applicable building codes, regulations, standards and James Hardie's written application instructions may lead to personal injury, affect system performance, violate local building codes, and void James Hardie's product warranty.
2. All warranties, conditions, liabilities (direct, indirect or consequential) and obligations whether arising in contract, tort or otherwise other than those specified in Hardie™ product warranty are excluded to the fullest extent allowed by law. For Hardie™ product warranty information and disclaimers about the information in this guide, visit www.jameshardie.com.au.
3. The builder must ensure the product meets aesthetic requirements before installation. James Hardie will not be responsible for rectifying aesthetic surface variations following installation.

2 Safe Working Practices

WARNING - DO NOT BREATHE DUST AND CUT ONLY IN WELL VENTILATED AREA

Fibre cement products manufactured by James Hardie contain sand, a source of respirable crystalline silica. **May cause cancer if dust from product is inhaled. Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product.** Intact fibre cement products are not expected to result in any adverse toxic effects. The hazard associated with fibre cement arises from the respirable crystalline silica present in dust generated by activities such as cutting, rebating, drilling, routing, sawing, crushing, or otherwise abrading fibre cement, and when cleaning up, disposing of or moving dust. When doing any of these activities in a manner that generates dust, follow Hardie™ instructions and best practices to reduce or limit the release of dust, warn others in the area and consider rotating personnel across the cutting task to further limit respirable silica exposure. If using a dust mask or respirator, use an AS/NZS1716 P1 filter and refer to Australian/New Zealand Standard 1715:2009 Selection, Use and Maintenance of Respiratory Protective Equipment for more extensive guidance and more options for selecting respirators for workplaces. For further information, refer to our installation instructions and Safety Data Sheets available at www.jameshardie.com.au. FAILURE TO ADHERE TO OUR WARNINGS, SAFETY DATA SHEETS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY OR DEATH.

James Hardie Recommended Safe Working Practices

CUTTING OUTDOORS

1. Position cutting station so wind will blow dust away from the user or others in working area.
2. Warn others in the area to avoid dust.
3. Consider rotating personnel across cutting tasks to further limit respirable silica exposures.
4. Use one of the following methods based on the required cutting rate:
Best ■ Villaboard™ knife ■ Hand guillotine ■ Fibreshear
Better ■ Position the cutting station in a well-ventilated area. Use a dust reducing circular saw equipped with Hardie™ Blade Saw Blade or comparable fibre cement blade and well maintained M-class vacuum or higher with appropriate filter for capturing fine (respirable) dust. Wear a properly-fitted, approved dust mask or respirator (minimum P1).

CUTTING INDOORS

- Cut only using Villaboard™ knife, hand guillotine or fibreshears (manual, electric or pneumatic).
- Position cutting station in a well-ventilated area.

DRILLING/OTHER MACHINING

When drilling or machining you should always wear a P1 dust mask and warn others in the immediate area.

IMPORTANT NOTES

1. For maximum protection (lowest respirable dust production) James Hardie recommends always using best practice cutting methods where feasible.
2. NEVER use a power saw indoors or in a poorly ventilated area.
3. ALWAYS use a dust reducing circular saw equipped with a sawblade specifically designed to minimise dust creation when cutting fibrecement - preferably a sawblade that carries the Hardie™ Blade logo or one with at least equivalent performance - connected to a M class or higher vacuum.
4. NEVER dry sweep - Use wet suppression, or an M class vacuum or higher with appropriate filter.
5. NEVER use grinders.
6. ALWAYS follow tool manufacturers' safety recommendations.
7. ALWAYS wear a properly fitted, approved dusk mask, P1 or higher

DUST MASKS AND RESPIRATORS

As a minimum, an AS/NZS1716 P1 respirator must be used when doing any activity that may create dust. For more extensive guidance and options for selecting respirators for workplaces please refer to Australian/New Zealand Standard 1715:2009 "Selection, Use and Maintenance of Respiratory Protective Equipment". P1 respirators should be used in conjunction with the above cutting practices to minimise dust exposure. For further information, refer to Safety Data Sheet (SDS) available at www.jameshardie.com.au. If concern still exists about exposure levels or you do not comply with the above practices, you should always consult a qualified industrial hygienist or contact James Hardie for further information.

STORAGE AND HANDLING

To avoid damage, all Hardie™ products and accessories should be stored with edges and corners of the product protected from chipping. Hardie™ products and accessories must be installed in a dry state and protected from weather during transport and storage. The product must be laid flat under cover on a smooth level surface clear of the ground to avoid exposure to water, moisture, etc.

3 Design Considerations

All design and construction must comply with the appropriate requirements of the current National Construction Code (NCC) and other applicable regulations and standards.

Slab and Footings

The slab and footings on which the building is situated must comply with AS 2870 'Residential slabs and footings – Construction' and the requirements of the NCC.

Ground Clearances

Install Hardie™ external cladding with a minimum 150mm clearance to the earth on the exterior of the building or in accordance with local building codes if greater than 150mm is required. Maintain a minimum 50mm clearance between Hardie™ external cladding and roofs, decks, paths, steps and driveways.

Adjacent finished grade must slope away from the building in accordance with local building codes, typically a minimum slope of 50mm over the first metre.

Do not install external cladding such that it may remain in contact with standing water.

NOTE

Greater clearance may be required in order to comply with termite protection provisions, see below for more information.

Termite Protection

The NCC specifies the requirements for termite barriers. Where the exposed slab edge is used as part of the termite barrier system, a minimum of 75mm of the exposed slab edge must be visible to permit ready detection of termite entry.

Fire Rated Walls

Hardie™ Oblique™ and Stria™ Cladding can be used as part of a fire rated wall when constructed with additional fire rated linings as specified in Hardie™ Fire and Acoustically Rated Design Manual and Construction of Fire and Acoustically Rated Walls Technical Specification or the Hardie™ Smart Boundary Wall System Design Guide. The length of fasteners must be increased for the additional linings.

Moisture Management

It is the responsibility of designer or specifier to identify moisture related risks associated with any particular building design. Wall construction design must effectively manage moisture, accounting for both the interior and exterior environments of the building, particularly in buildings that have a higher risk of wind driven rain penetration or that are artificially heated or cooled.

In addition, all wall openings, penetrations, junctions, connections, window sills, heads and jambs must incorporate appropriate flashing and waterproofing. Materials, components and their installation that are used to manage moisture in framed wall construction must, at a minimum, comply with the requirements of relevant standards and the NCC.

Weather Barrier

A suitable water control membrane must be installed under Hardie™ cladding products in accordance with the AS/NZS 4200.2 'Pliable building membranes and underlays – Installation' and NCC requirements.

James Hardie has tested and certified the use of Hardie™ Wrap Weather Barrier for Climate Zones 2-8 within Australia. Hardie™ Wrap Weather Barrier is a Class 4 vapour permeable membrane that delivers a tripleshield of protection to help against external weather penetration, internal condensation management and external heat penetration through its safeglare reflective layer.

If using an alternate product in lieu of Hardie™ Wrap Weather Barrier or the project is located in a hot, humid area (Climate Zone 1), the designer must ensure that the product is fit for purpose and it has the following classification in accordance with AS/NZS 4200.1:2017 'Pliable building membranes':

TABLE 1

Weather Barrier Classification		
Climate Zone	Water Control Classification	Vapour Control Category
2-8	Water Barrier	Vapour Permeable (Class 3 or 4)
1		Vapour Barrier (Class 1 or 2)

Soft compressible insulation installed between the front of the wall studs and directly behind the external cladding can cause installation issues and is thus not recommended.

Flashing

All wall openings, penetrations, intersections, connections, window sills, heads and jams must be flashed prior to cladding installation.

FRAMING

General

Vertical Hardie™ Oblique™ and Stria™ Cladding can be installed over timber or steel frames or masonry walls. Please note, the product must be installed using the Hardie™ Structural Batten to allow for drainage, ventilation and provide vermin protection. The general framing requirements for installation are given in Table 2.

Maximum stud, Hardie™ Cavity Batten and fastener spacing for Hardie™ Oblique™ and Stria™ Cladding for wind load classifications of AS 4055 'Wind Loads for Housing' are given in Table 4 & 5.

Ensure framing joints are tight and all framing is fully loaded before Hardie™ Oblique™ and Stria™ Cladding is installed.

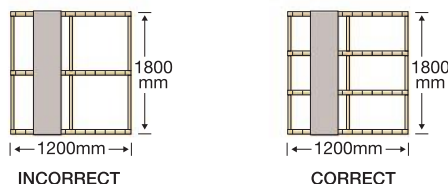
TABLE 2

General Framing Requirements		
Type	Timber	Steel
Design	Use of timber framing must be in accordance with AS 1684 and the framing manufacturer's specifications	Use of steel framing must be in accordance with NASH standard for Residential and Low-Rise Steel Framing Part 1: Design Criteria and the framing manufacturer's specifications.
Durability	'Timber used for house construction must have the level of durability appropriate for the relevant climate and expected service life. Reference AS 1684.2 'Residential timber-framed construction'.	The steel framing must have the appropriate level of durability required to prevent corrosion, particularly in coastal areas.
Tolerances	Ensure frame is square and work from a central datum line. A suggested maximum tolerance of between 3mm and 4mm in any 3000mm length of frame will give best results.	
Thermal Break Requirement	Not required.	For steel frames, the NCC Sections J3D6 and 13.2.5 Volumes 1 and 2 respectively, state for both residential and commercial buildings a thermal break with an R 0.2m2 K/W must be installed behind external cladding where the cladding and internal lining make direct contact with the same steel frame. Timber battens with a minimum thickness of 20mm are deemed to achieve an R-Value greater than or equal to 0.2. If installing on a 0.55bmt steel frame, reach out to James Hardie on 13 11 03 for further information.
BMT	N/A.	Framing members must have a base metal thickness (BMT) between 0.75 to 1.6mm.
Grade	MGP10	G550
Min. Stud Width	35mm*	32mm
Min. Stud Depth	70mm	64mm
Nogging Spacing	1350mm	1350mm

* Only suitable for off-stud Hardie™ Structural Batten joining. For on-stud joining, a minimum stud width of 45mm is required. Refer to Page 10 for further information.

Hardie™ Structural Batten Span

In locations where Hardie™ Structural Batten is installed on a wall that is equal to or less than 1200mm wide and 1800mm high, an additional batten must be introduced to increase the span of cladding to 3 bays.



Each Hardie™ Structural Batten length must be fixed to a minimum of two studs, i.e., when joining the batten off-stud, the joints must not be located on two continuous stud bays.

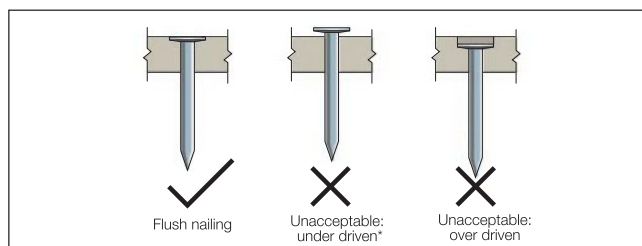
FASTENERS

General

All nails must be driven flush. **Ensure the aesthetic finish of Hardie™ Oblique™ and Stria™ Cladding is of acceptable quality prior to installation, see Important Note 3 on page 2 of this guide.** For more information and advice, Ask James Hardie™ on 13 11 03.

Fastener Durability (Including Coastal Areas)

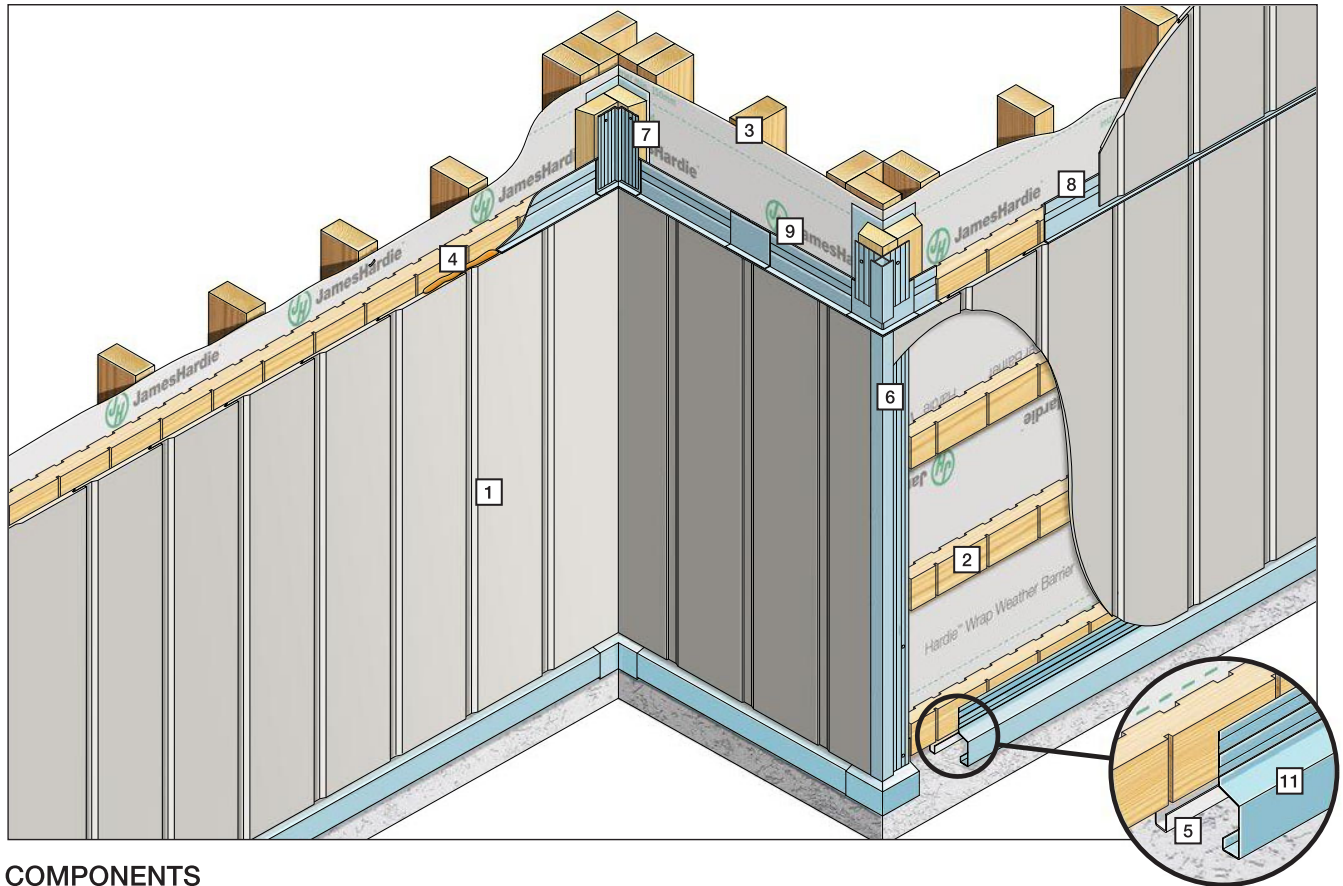
Fasteners must have the appropriate level of durability and be fully compatible with all other materials required for the intended project. In areas within 1km of a coastal area, areas subject to salt spray and other corrosive environments, class 4 fasteners must be used.



NAIL FASTENER DEPTH

* Only when face fixing, fasteners can be under driven and tapped maximum 1mm below the surface of the board (Do not overdrive using gun nails). All fastener penetrations must be patched and sanded. Refer to the Finishing and Maintenance section on Page 12.

4 Products and Accessory Details



COMPONENTS

1	Hardie™ Oblique™ Cladding		Product Code	Length (mm)	Width (mm)	Weight (kg/m²)*	Pack Size
	Pre-sealed 14mm thick shiplap boards with unique square and angled groove edges to cast shadows and deliver highlights.		405502	3000	200	18.4	75
			405503	3000	300	18.8	45
			405301	4200	200	18.4	75
			405303	4200	300	18.8	45
Stria™ Cladding			Product Code	Length (mm)	Width (mm)	Weight (kg/m²)*	Pack Size
	Pre-sealed 14mm thick shiplap boards with deep and wide grooves to create strong, clean lines.	Stria™ Standard	404063	4200	325	19.1	60
			405504	3000	325	19.1	60
		Stria™ Wide	404413	4200	405	19.4	40
			405505	3000	405	19.4	40

* Includes the product weight only, taking into account effective coverage. This excludes fasteners, sealants and other accessories.

External Corner

2 Hardie™ Structural Batten A structural, castellated 70 x 35 x 2700mm H3 treated timber batten that facilitates drainage and ventilation in the cavity wall. Pack Size: 4 Each. Product code: 306250	3 Hardie™ Wrap Weather Barrier Water barrier and vapour permeable membrane. Unit size: 2.75 x 30m. Pack Size: 1 Each. Product Code: 305664 Coverage: 85.5m² per roll	4 Hardie™ Joint Sealant General purpose polyurethane exterior grade joint sealant. Pack Size: 20/Box. Product Code: 305534 300ml Cartridge Product Code: 305672 600ml Sausage Coverage: 2.67m/100ml (5mm dia bead)	5 Hardie™ 35mm PVC Cavity Vent Strip A 3000mm long perforated PVC extrusion installed at the base of the cladding wall system to provide drainage, ventilation and vermin proofing. Pack Size: 25. Product Code: 306253	6 Hardie™ 14mm Aluminium External Box Corner A ready to paint aluminium extrusion. 3000mm long. Pack Size: 5 Product Code: 305519 Coverage: Height of wall x no. of external corners / 3000mm
---	--	--	---	---

Internal Corner Options

7 Hardie™ 14mm Aluminium Internal Corner A ready to paint aluminium extrusion. 3000mm long. Pack Size: 5. Product Code: 305518 Coverage: Height of wall x no. of external corners / 3000mm	7 Hardie™ 75mm Corner Flashing Manufactured using COLORBOND® steel, used behind cladding at internal and external corners. 75 x 75mm. Pack Size: 5. Product Code: 305564 Coverage: Height of clad walls x no. of corners / 3000mm
--	---

Horizontal Flashing

8 Hardie™ Trimline Flashing To be used at horizontal joints (vertical cladding) or vertical butt joints (Horizontal cladding). (5/pack) Product Code: 306128. 3000mm Coverage: Length of horizontal joints / 3000mm	9 Hardie™ TrimLine External & Internal Corner Jointers For use with Hardie™ TrimLine Flashing at corner joints. External Corner Product Code: 306130 Internal Corner Product Code: 306131 (20/pack of each kind)	9 Hardie™ TrimLine Horizontal Jointer For use with Hardie™ TrimLine Flashing at horizontal joints. Product Code: 306132 (20/pack)
---	--	--

11 Hardie™ Edge Base Trim  Powder coated aluminium extrusion used at slab edges. Pack Size: 25 units. Product Code: 305911	11 Hardie™ Edge Base Trim Joiner  Powder coated aluminium extrusion used with Hardie™ Edge Base Trim. Pack Size: 12 units. Product Code: 305912	11 Hardie™ Edge Internal Corner  Powder coated aluminium extrusion used with Hardie™ Edge Base Trim at internal corner junctions. Pack Size: 4 units. Product Code: 305913	11 Hardie™ Edge External Corner  Powder coated aluminium extrusion used with Hardie™ Edge Base Trim at external corner junctions. Pack Size: 4 units. Product Code: 305914
---	--	---	---

Tools

Hardie™ Blade Saw Blade 185mm Diameter  Poly-diamond blade for Hardie™ fibre cement. Product Code: 300660 Pack Size: 1 each.	Dust-Reducing Saw with M class or higher vacuum Extraction  Dust reducing saw with a Hardie™ Blade saw blade. E.g. Makita 5057KB / Hitachi C7YA.	Drop Saw*  Drop saw with an aluminium blade. *Not to be used for cutting Hardie™ Oblique™ or Stria™ Cladding.	Gun Nails and Nailers Refer to fastener section  Suitable gun nails and nailers for face fixing to timber framing only. Minimum nail length of 50mm is required. Minimum class 3.
---	---	--	---

5 Facade Layouts

The following patterns showcase different board width combinations that can be used on the facade's design, elevating the layout and adding a unique touch to the home's exterior. Each pattern can be repeated along the wall, or combined with a different sequence to create a more intricate design.

The below sequences are represented using Hardie™ Oblique™ Cladding, however, these can be created as well using Stria™ Cladding; just follow the same sequence alternating between Stria™ Wide and Standard profiles as described. Please note, these patterns serve as an inspiration and starting point to create bespoke combinations and facade layouts, resulting in unique home exteriors.



Standard Pattern

This pattern creates consistency and symmetry within the facade, providing stability and balance to the design. The 300mm board provides a bolder look, whereas the 200mm width provides a more refined design.

300 | 300 | 300 | 300 | 200 | 200 | 200 | 200



Alternate Pattern

This pattern introduces rhythm to the facade by adding some visual interest combining the two different widths whilst maintaining cohesion.

300 | 200 | 300 | 200



Mixed Duo Pattern

By expanding and contracting between narrow and wider boards, this pattern adds contrast to the design and creates a more complex and intricate facade, creating visual interest and adding dimension to the home exterior.

200 | 200 | 300 | 300



Dynamic Duo Pattern

This pattern plays between randomness and uniformity, creating complexity and movement along the home exterior, which results in dynamic and visually engaging designs.

300 | 200 | 200 | 300 | 200 | 300 | 300 | 200



Rhythmic Pattern

This pattern creates rhythm along the home's exterior by alternating between narrow and wider boards, as well as single and double combination, creating complexity and interest in the design.

300 | 200 | 300 | 300 | 200 | 200 | 300 | 200 | 200 | 300



Custom Pattern

The various board profiles and widths can be combined in any sequence, enabling a customized facade layout that perfectly complements your home and personal style.

6 Fixing Requirements

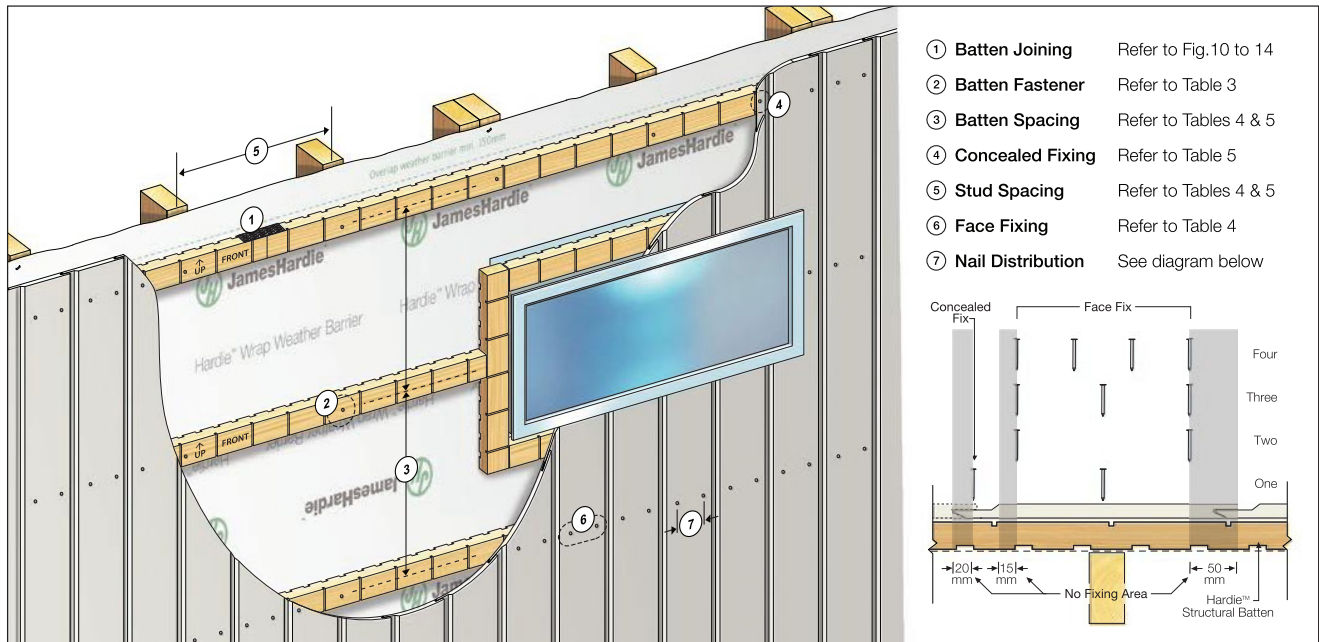


TABLE 3

Hardie™ Structural Batten to Frame Fastener Selection		
Timber Frame	Steel Frame	Masonry
1No - 14-10 x 75mm T17 Batten Screw 1No - 10g x 75mm Treated Pine Screw 2No - 65 x 2.87 Galvanized Ring Shank Nail [#]	2No 65mm Icons Super Sharpy StructNail 2No 14-10 x 75mm Self Drilling Bugle Batten Screw 2No 10-24 x 65mm Fine Thread Countersunk Self-Drilling Screw*	Ramset Chemset 101 Plus M8 or M10 Anchors [^]

[#] Limited to a N3/C1 Wind Classification.

* Not suitable on N4/C2 wind category or greater. When installing on N3/C1, the Hardie™ Structural Batten spacing must be reduced to 800mm.

[^] Up to N3/C1, the fixing points must be spaced at max. 500mm, and for N4/C2 at 300mm apart. For higher wind categories contact James Hardie for further information, and refer to manufacturer specifications for installation guidance and product suitability.

TABLE 4

Face Fixing - Stud and Batten Spacing and Fastener Requirements													
AS4055 Wind Classification	Studs and Hardie™ Structural Batten Maximum Spacing (mm)				Number of fastener required per fixing point - Cladding to Batten								
	Studs		Hardie™ Structural Battens		50x2.50mm Ring Shank Coil Nails			ND 50mm Stainless Steel Brad Nails			Paslode 50x2.87mm DekFast Nails		
	General	Edges [†]	General	Edges [†]	405 Stria™ Cladding	325mm Stria™ / 300mm Hardie™ Oblique™ Cladding	200mm Hardie™ Oblique™ Cladding	405 Stria™ Cladding	325mm Stria™ / 300mm Hardie™ Oblique™ Cladding	200mm Hardie™ Oblique™ Cladding	405 Stria™ Cladding	325mm Stria™ / 300mm Hardie™ Oblique™ Cladding	200mm Hardie™ Oblique™ Cladding
N1	600	600	900	900	1	1	1	2	2	2	1	1	1
N2	600	600	900	900	1	1	1	2	2	2	1	1	1
N3/C1	600	600	900	900	2	2	1	4	3	2	1	1	1
N4/C2	600	450 (600)	900	900 (600)	3 (2)	2	2 (1)	(4)	(3)	(2)	2	2	1
N5/C3	600	450	900	600	3	2	2				2	2	1
N6/C4	450 (600)	400	900 (600)	450	3	2	2				2	2	1

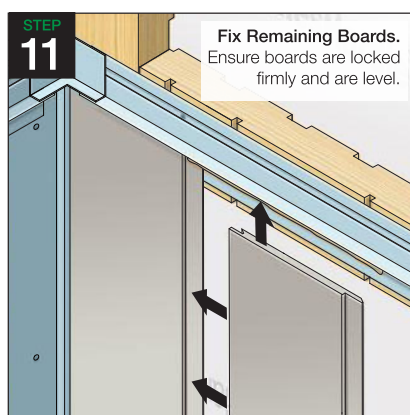
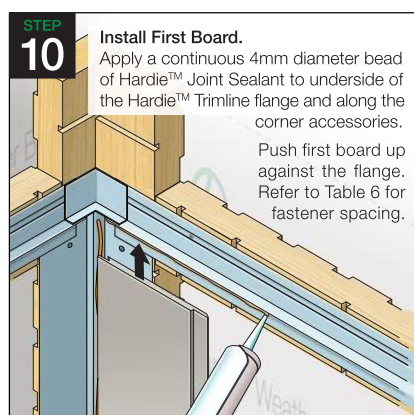
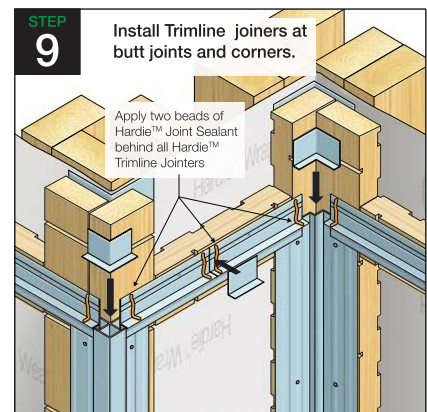
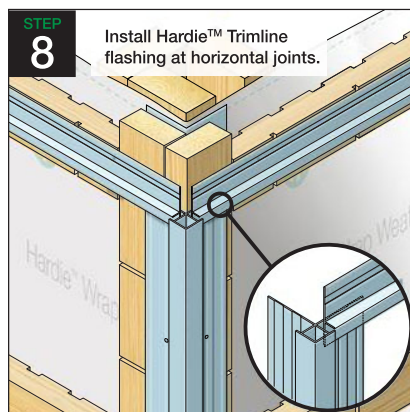
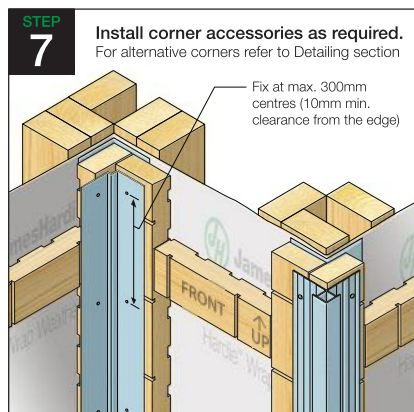
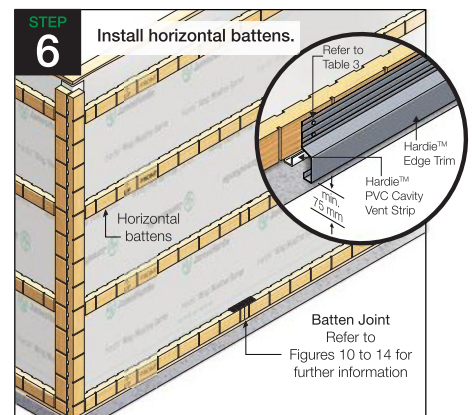
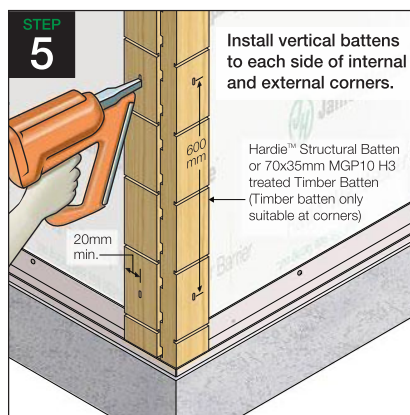
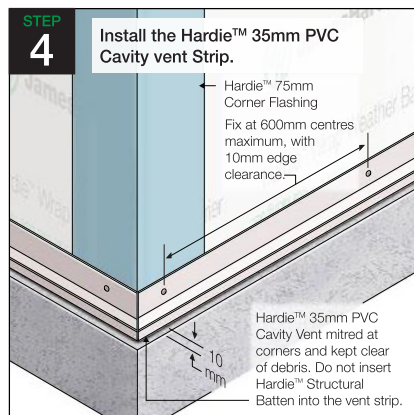
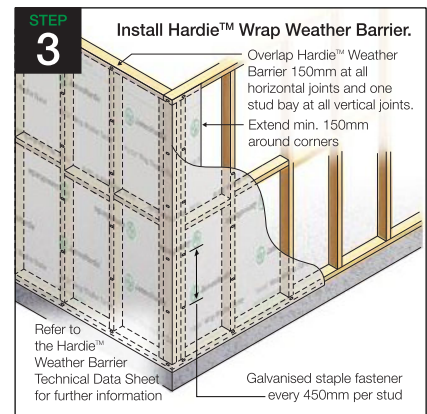
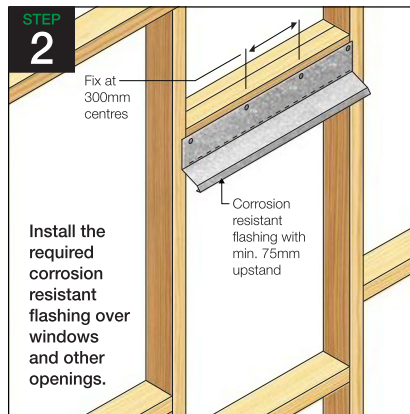
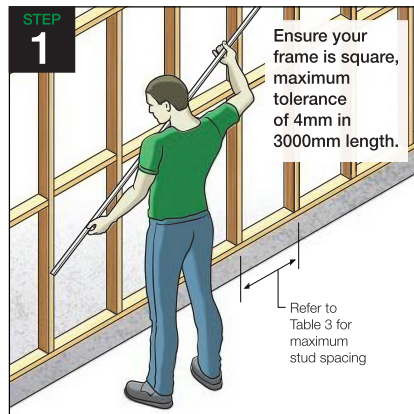
All values in brackets must be used together, including adherence to the number of fasteners required per fixing point.

TABLE 5

Concealed Fixing - Stud and Batten Spacing and Fastener Requirements							
AS4055 Wind Classification	Studs and Hardie™ Structural Batten Maximum Spacing (mm)				Number of fastener required per fixing point - Cladding to Batten		
	Studs		Hardie™ Structural Battens		40x2.80mm Fibre Cement Nail		50x2.50mm Ring-Shank Coil Nail or Paslode 45x2.50mm Ring-Shank Nail
	General	Edges [†]	General	Edges [†]	325mm Stria™ / 300mm Hardie™ Oblique™ Cladding	200mm Hardie™ Oblique™ Cladding	325mm Stria™ / 300mm Hardie™ Oblique™ Cladding
N1, N2	600	600	600	600	1	1	1
N3/C1	600	600	600	600	1	1	

[†] Edge areas refers to walls at external corners of the house within 1200mm of the corner.

7 Cladding Installation Steps* - Vertical



8 Construction Details

JUNCTION DETAILS

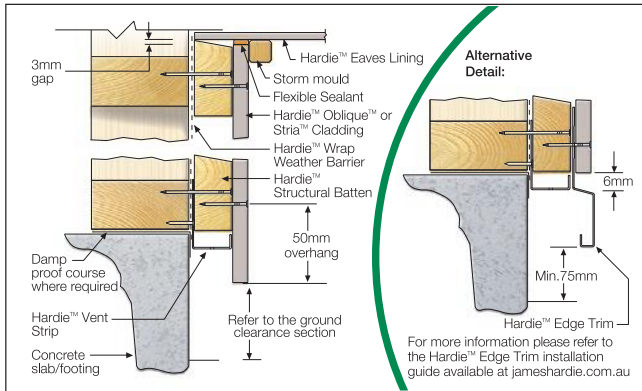


FIGURE 1 SLAB/EAVE JUNCTION DETAIL

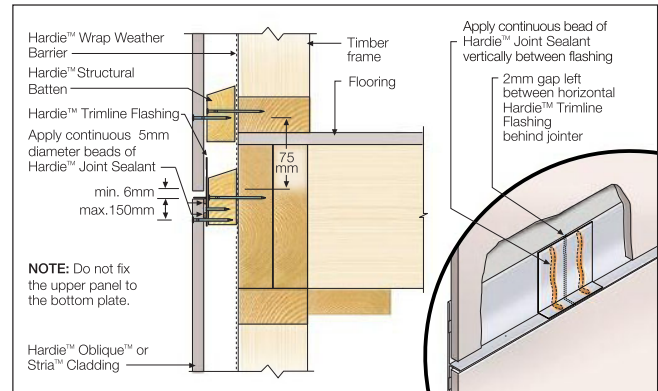


FIGURE 2 UPPER FLOOR JUNCTION

INTERNAL CORNER DETAILS

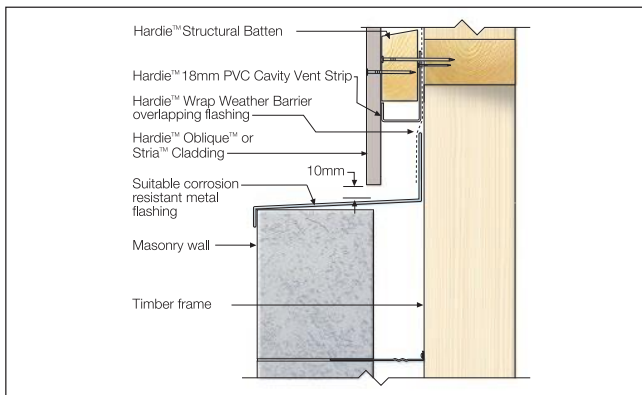


FIGURE 3 HORIZONTAL JUNCTION

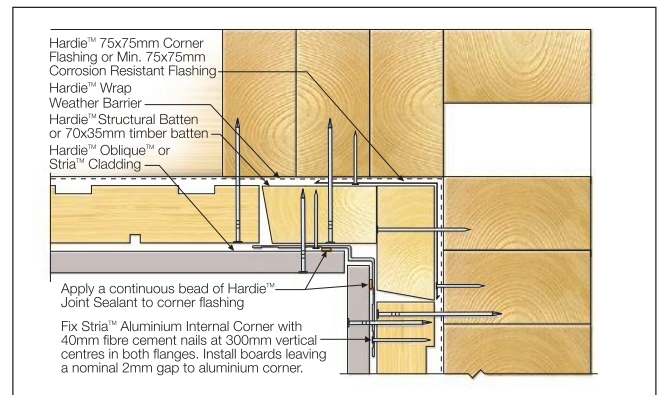


FIGURE 4 INTERNAL CORNER

EXTERNAL CORNER DETAILS

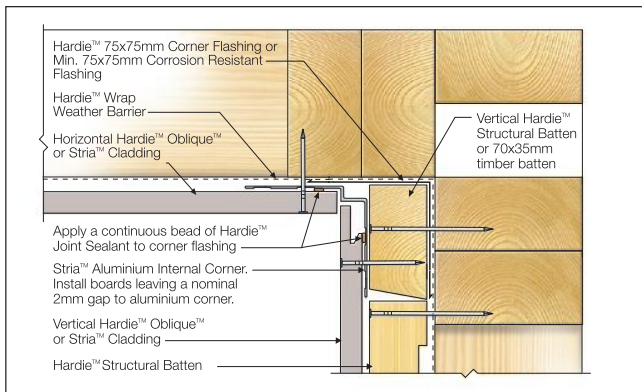


FIGURE 5 INTERNAL CORNER BETWEEN VERTICAL AND HORIZONTALLY ORIENTED BOARDS

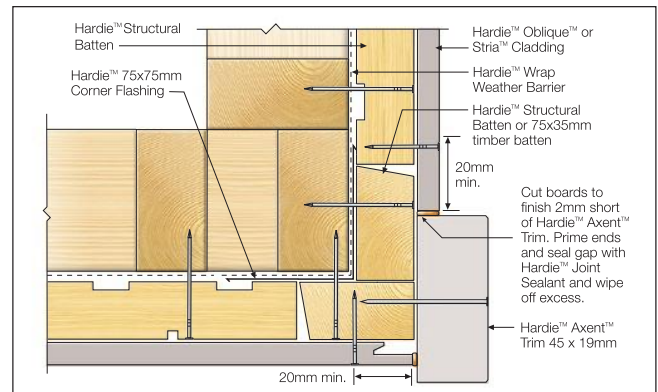


FIGURE 6 EXTERNAL TRIM CORNER

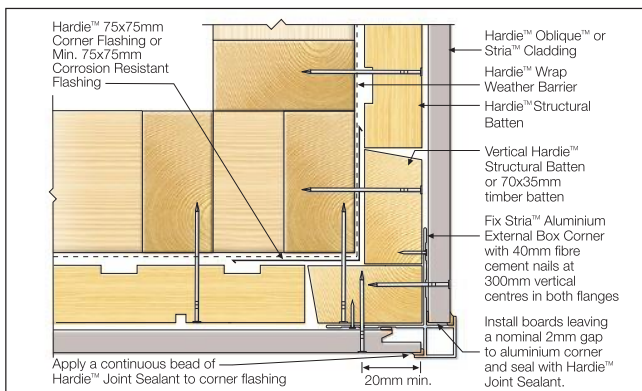


FIGURE 7 EXTERNAL BOX CORNER

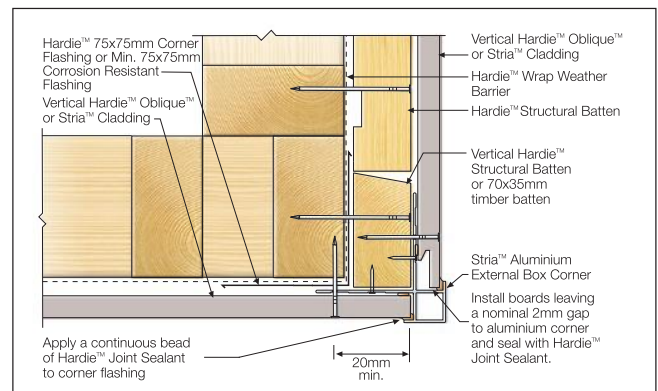


FIGURE 8 EXTERNAL CORNER BETWEEN VERTICAL AND HORIZONTALLY ORIENTED BOARDS

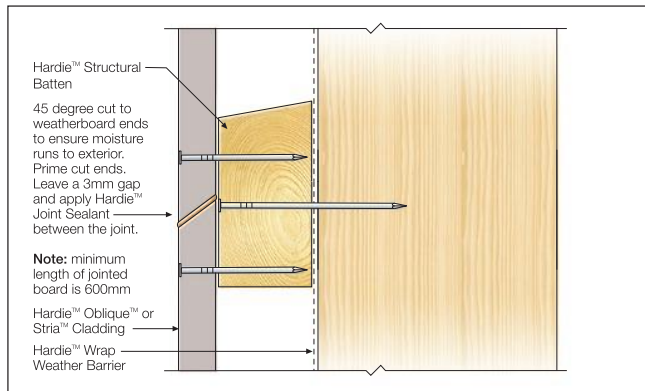


FIGURE 9 VERTICAL BUTT JOINT DETAIL

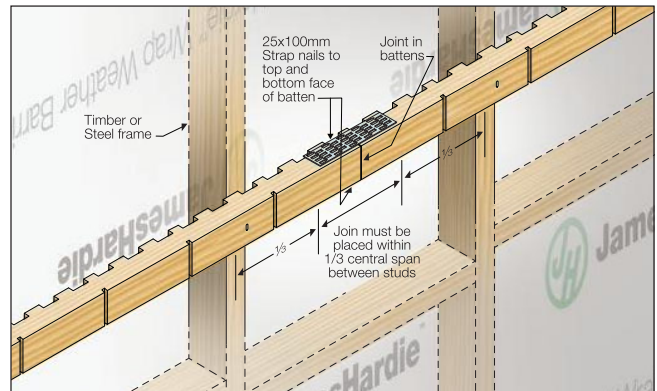


FIGURE 10 OFF-STUD JOINTING OF BATTENS - OPTION 1

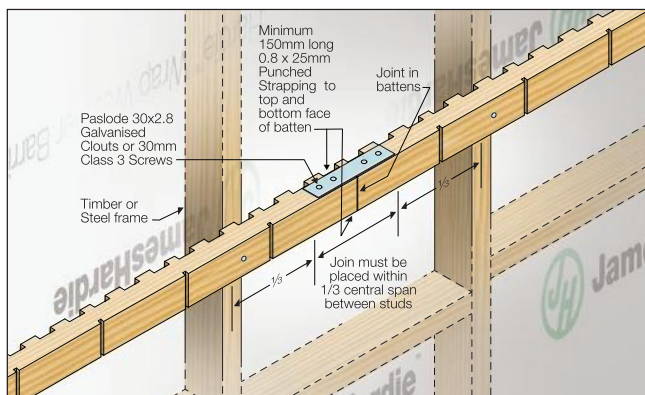


FIGURE 11 OFF-STUD JOINTING OF BATTENS - OPTION 2

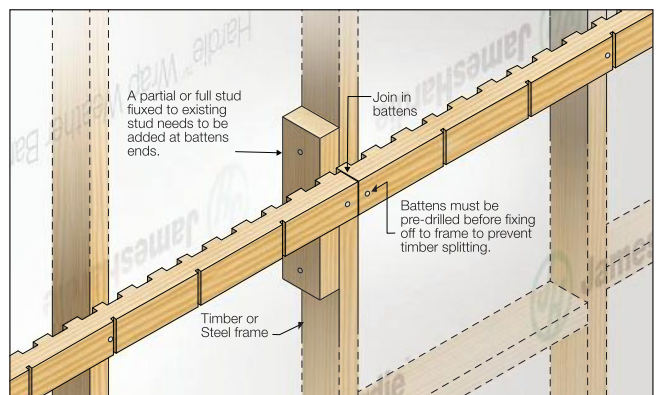


FIGURE 12 ON-STUD JOINTING OF BATTENS

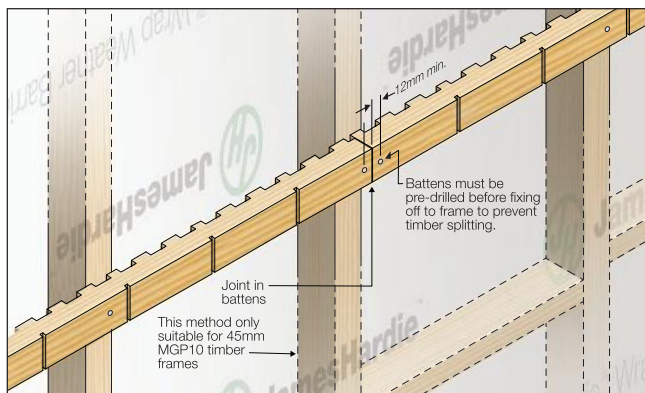


FIGURE 13 ON-STUD JOINTING OF BATTEN ON 45MM TIMBER FRAMES

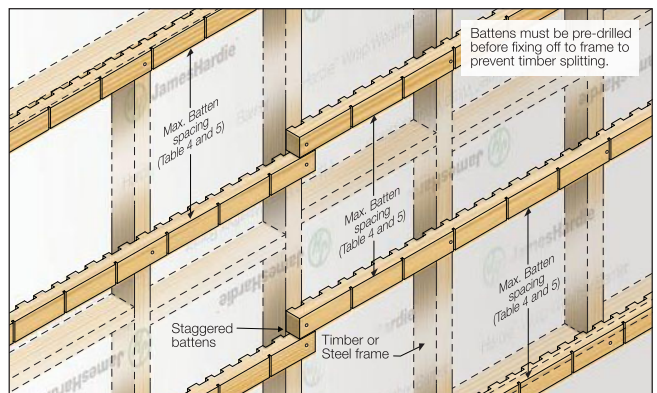


FIGURE 14 ON-STUD STAGGERED JOINTING OF BATTENS

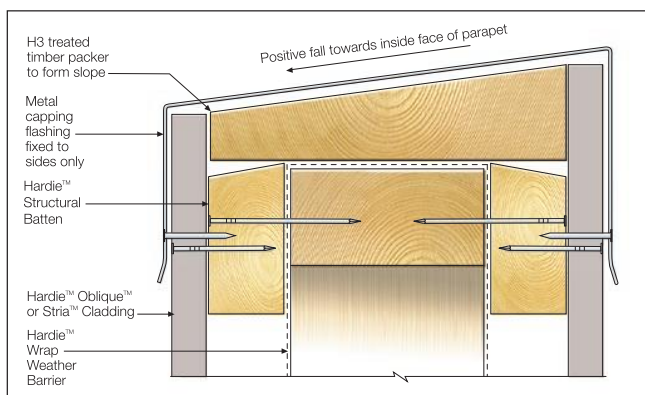


FIGURE 15 PARAPET DETAIL

WINDOW DETAILS

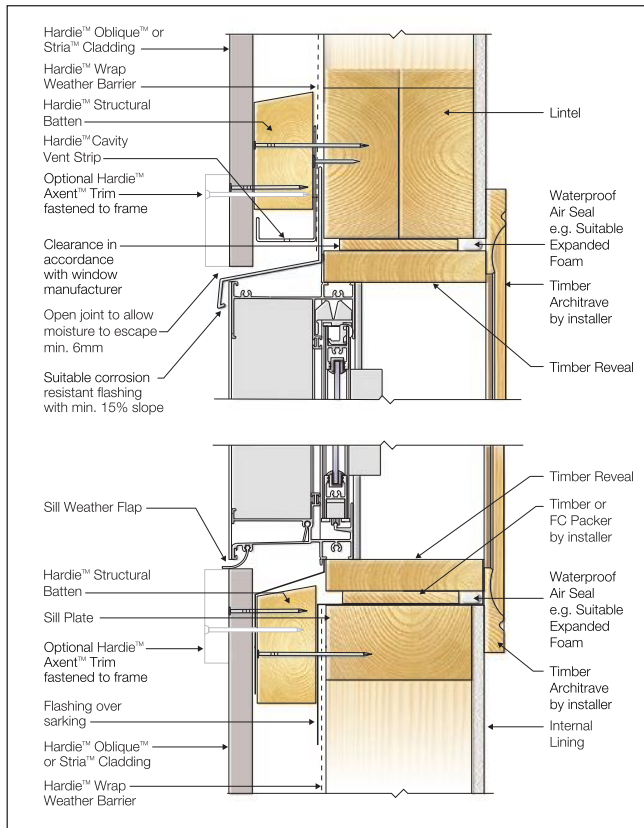


FIGURE 16 WINDOW HEAD AND SILL - TRIM

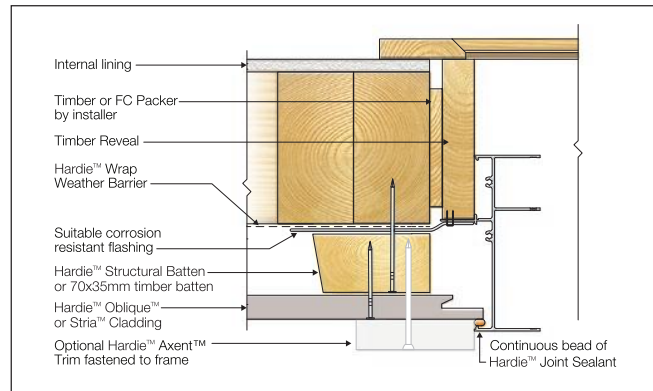


FIGURE 17 WINDOW JAMB - TRIM

9 Finishes and Maintenance

SURFACE PREPARATION

Ensure the surface is dry, clean and any overdriven nails are patched in accordance with this specification.

Any slightly overdriven brad nails (1mm max.) may be repaired using a suitable external grade filling agent. All patches must be sanded and primed before applying the paint.

Sealants

James Hardie recommends the use of Hardie™ Joint Sealant, which is a paintable polyurethane sealant. If using an alternative sealant, it must be a quality polyurethane sealant compatible with fibre cement and the specified paint system if coated. Please refer to the manufacturer's instructions for further information.

PAINTING

Panels must be finished within 3 months of being fixed with the recommended coating set out in Table 4 and the project specification. In areas within 1km of a coastal area or corrosive environment, panels must be coated immediately after fixing sheets to minimise contamination build up on the heads of the fasteners.

MAINTENANCE

The extent and nature of maintenance will depend on the geographical location and exposure of the building. As a guide, it is recommended that basic normal maintenance tasks shall include but not be limited to:

- Washing down exterior surfaces every 6-12 months*
- Periodic inspections should be made to ensure fasteners are adequately securing the sheets to framing.
- Re-applying of exterior protective finishes*
- Maintaining the exterior envelope and connections including joints, penetrations, flashings and sealants that may provide a means of moisture entry beyond the exterior cladding.
- Cleaning out gutters, blocked pipes and overflows as required.
- Pruning back vegetation that is close to or touching the building.

*Refer to your paint manufacturer for washing down and recoating requirements related to paint performance.

10 Product Information

PRODUCT INFORMATION

Material

The basic composition of Hardie™ building products is Portland cement, ground sand, cellulose fibre, water and proprietary additives.

Hardie™ building products are manufactured to AS/NZS 2908.2 'Cellulose-Cement Products-Flat Sheet'. These are also compliant with equivalent standard ISO 8336 'Fibre-cement flat sheets - Product specification and test methods'. For product classification refer to the relevant Physical Properties Data Sheet.

Durability

Resistance to Moisture/Rotting

Hardie™ Oblique™ and Stria™ Cladding have demonstrated resistance to permanent moisture induced deterioration (rotting) by passing the following tests in accordance with AS/NZS 2908.2:

- Water permeability (Clause 8.2.2)
- Heat rain (Clause 6.5)
- Warm water (Clause 8.2.4)
- Soak dry (Clause 8.2.5)

Resistance to fire

The Hardie™ Oblique™ and Stria™ Cladding are suitable where non-combustible materials are required in accordance with C2D10 and H3D2 of the National Construction Code (NCC) Vol 1 and 2 respectively.

Hardie™ building products have been tested by CSIRO in accordance with AS/NZS 3837 and are classified as conforming to Group 1 material (highest and best result possible), with an average specific extinction area far lower than the permissible 250m²/kg, as referenced in Specification C2D11(1) of the NCC 2022.

Resistance to Termite Attack

Based on testing completed by CSIRO Division of Forest Products and Ensis Australia, Hardie™ building products have demonstrated resistance to termite attack.

Alpine Regions

In regions subject to freeze/thaw conditions, all James Hardie fibre cement external cladding must be installed and painted in the warmer months of the year where the temperature does not create freeze and thaw conditions or paint issues. The cladding must be painted immediately after installation. In addition, fibre cement cladding must not be in direct contact with snow and/or ice build up for extended periods, e.g. external walls in alpine regions subject to snow drifts over winter.

Furthermore, a reputable paint manufacturer must be consulted in regards to a suitable product, specifications and warranty. The paint application must not be carried out if the air temperature or the substrate temperature is outside the paint manufacturer's recommendation including the specified drying temperature range

Hardie™ external cladding products are tested for resistance to frost in accordance with AS/NZS 2908.2 Clause 8.2.3.

11 Site Installation Checklist

USING THE CHECKLIST

Highlighting some key features of the Hardie™ Oblique™ and Stria™ Cladding Installation Guide, this checklist has been created to assist you in the installation of Hardie™ Oblique™ and Stria™ Cladding in a vertical orientation. Ensure all requirements of each stage are completed and marked as such before progressing to the next stage.

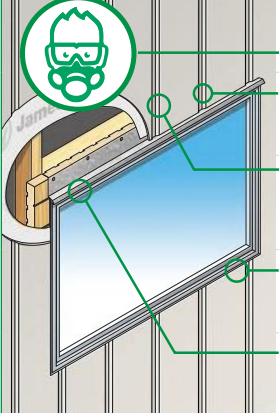
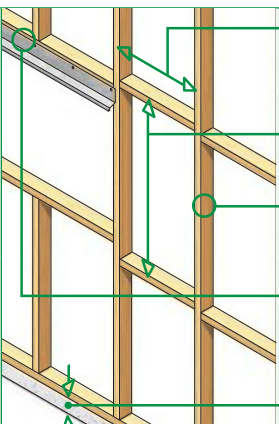
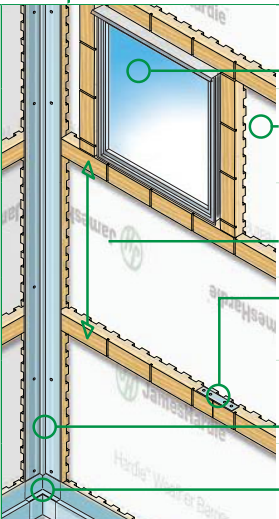
IMPORTANT: This checklist is not an exhaustive list of all compliance and construction requirements and it must only be used as a supplement to, and not a substitute for, compliance with the entirety of the Hardie™ Oblique™ and Stria™ Cladding Installation Guide current at the time of installation. Please note, this checklist is for your own use, it is not to be submitted to James Hardie, and completion of this checklist does not evidence, and will not be accepted as being evidence of compliance with the Hardie™ Oblique™ and Stria™ Cladding Installation Guide.

Project location: _____ Installer: _____

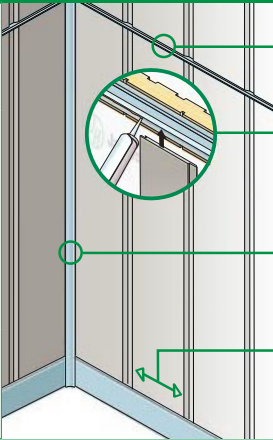
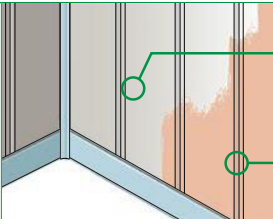
Project Wind Category: N1 & N2 | N3/C1 | N4/C2 | N5/C5 | N6/C4 Fixing method: Face Fixing | Concealed Fixing

Frame Material: Timber | Steel | Masonry Batten Spacing (mm): 900 | 600 | 450 Stud Spacing (mm): 600 | 450 | 400 Board Fastener: _____

Batten Fastener: _____ No. of Board Fasteners: 1 | 2 | 3 | 4 Corrosive environment: Yes - Less than 1km to coastal area | Yes - Other | No

Stage	Diagram	Requirement	Reference	Completed	Comments
Planning		Safe Working Practices Ensure you understand how to work safely with Fibre Cement.	Page 3	☐ YES ☐ NO	
		Board sizes Ensure optimal board size is chosen based on wall dimensions.	Page 5 Item 1	☐ YES ☐ NO	
		Facade Layout Plan the pattern to be used along the wall, based on the home design and style.	Page 7	☐ YES ☐ NO	
		Window/door reveal sizing Verify overall frame thickness compared to window reveal sizing.	Page 12 Fig 16-17	☐ YES ☐ NO	
		Customized flashing dimensions Determine the geometry of flashings over openings.	Page 9 Step 2	☐ YES ☐ NO	
Framing Preparation		Stud spacing Verify the maximum stud spacing based on the projects wind category.	Page 8 Table 4 and 5	☐ YES ☐ NO	
		Noggin Spacing Ensure the noggins are within the maximum allowed.	Page 4 Table 2	☐ YES ☐ NO	
		Frame straightness Ensure the frame is square.	Page 9 Step 1	☐ YES ☐ NO	
		Flashing above window and openings All required flashings are installed over openings.	Page 9 Step 2	☐ YES ☐ NO	
		Ground Clearance Frame installed considering minimum distance to the ground.	Page 3 Ground Clearance	☐ YES ☐ NO	
Pre-Cladding		Windows/doors installed Windows and doors installed to manufacturers specification.	Page 12 Fig 16-17	☐ YES ☐ NO	
		Hardie™ Wrap Weather Barrier installation Installed in accordance with the product's installation guide.	Page 9 Step 3	☐ YES ☐ NO	
		Hardie™ Structural Batten Spacing All battens are within the maximum separation permitted	Page 8 Table 4 and 5	☐ YES ☐ NO	
		Hardie™ Structural Batten Jointing All battens are joined correctly.	Page 11 Fig 10-14	☐ YES ☐ NO	
		Corner installation Internal and external corner accessories installed.	Page 10 Fig 4-8	☐ YES ☐ NO	
		Horizontal trim installation Base trims and flashing installed to manufacturers specifications.	Page 10 Fig 1	☐ YES ☐ NO	

11 Site Installation Checklist cont.

Stage	Diagram	Requirement	Reference	Completed	Comments
Cladding Installation		Hardie™ Trimline Flashing Flashing is Installed.	Page 9 Step 8	☐ YES ☐ NO	
		Sealant under Hardie™ Trimline Flashing Sealed with Hardie™ Joint Sealant.	Page 9 Step 10	☐ YES ☐ NO	
		Sealant behind corners All corners sealed with Hardie™ Joint Sealant.	Page 9 Step 11	☐ YES ☐ NO	
		Number of Fasteners Minimum number of fasteners based on specified wind category and fixing method.	Page 8 Table 4 and 5	☐ YES ☐ NO	
Painting		Surface imperfections repaired All imperfections and over-driven nails are fixed.	Page 13 Section 9	☐ YES ☐ NO	
		Wall painted Wall painted within the maximum recommended time.	Page 13 Section 9	☐ YES ☐ NO	



**For information and advice
call 13 11 03 | jameshardie.com.au**

Australia May 2024



© 2024 James Hardie Australia Pty Ltd ABN 12 084 635 558
™ and ® denote a trademark or registered mark owned by James Hardie Technology Limited.
Codemark®, Colorbond®, Hitachi, Makita® and Hilti are trademarks or registered trademarks of
their respective owners and are not owned by James Hardie Technology Limited.